

Notice of Allowability

Application No.

10/667,561

Examiner

TISHA D. LEWIS

Applicant(s)

ABRAMOV, VLADIMIR

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on August 12, 2005.
2. ☒ The allowed claim(s) is/are 3,22-24,26 and 27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

The following is a response to the amendment received on August 12, 2005 which has been entered.

Response to Amendment

Claims 3, 22-24, 26 and 27 are pending in the application. Claims 1, 2, 4-21 and 25 have been cancelled.

-The objection to claim 3 has been withdrawn due to applicant correcting a grammar error.

-The 102(e) rejection of claims 1 and 2 has been withdrawn due to the cancellation of claims 1 and 2.

-The 102(b) rejection of claims 1, 2, 4, 7-15 and 25 has been withdrawn due to the cancellation of these claims.

-The 103(a) rejection of claims 5 and 6 has been withdrawn due to the cancellation of claims 5 and 6.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William R. Berggren on August 31, 2005.

The application has been amended as follows:

-In claim 3, line 5, after "wherein the", -degrees of separation of the- has been inserted.

-In claim 3, line 5, after "ratio", -for each pair of shafts- has been inserted.

-In claim 3, line 5, before "number", -total- has been inserted.

-In claim 3, line 5, before "gearset", -forward speeds from- has been inserted.

-In claim 3, line 6, "of forward speeds" has been deleted.

-In claim 3, line 6, "two" has been deleted and replaced with -a first pair of-.

-In claim 3, line 7, -, and then- has been inserted after "more".

-In claim 3, lines 8 and 9, "and the degrees of separation of the common ratio for gearsets between a next pair of shafts is determined by" has been deleted.

-In claim 3, line 9, before "common", -degree of—has been inserted.

-In claim 3, line 10, before "until", -having two or more gearsets- has been inserted.

-In claim 3, lines 11 and 12 have been deleted and replaced with -the geometric sequence for each pair of shafts includes 1-.

-In claim 27, lines 8 and 9, "for each" has been deleted.

Allowable Subject Matter

Claims 3, 22-24, 26 and 27 are allowed. The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose or render obvious a motivation to provide for:

-(as to claim 3) a gearbox having degrees of separation of a common ratio for pairs of shafts calculated by dividing a total number of forward speeds by a number of forward speeds between gearsets of a first pair of shafts and then dividing the degree from the prior pair of shafts by a number of gearsets between a next pair of shafts in combination with all the remaining limitations of claim 3.

-(as to claim 22) a gearbox having a common ratio in a geometric sequence with a first gearset having a common ratio selected from R^{12} , $1/R^8$ and $1/R^6$, a second gearset having a common ratio selected from $1/R^4$, $1/R^2$ and $1/R^3$ and a third gearset having a common ratio selected from $1/R$ in combination with all the remaining limitations of claim 22.

-(as to claim 23) a gearbox having a common ratio in a geometric sequence with a first gearset having a common ratio selected from R^{12} and $1/R^4$, a second gearset having a common ratio selected from $1/R^6$ and $1/R^2$ and a third gearset having a common ratio selected from $1/R$ in combination with all the remaining limitations of claim 23.

-(as to claim 24) a gearbox having a common ratio in a geometric sequence with a first and second gearset having a common ratio selected from R^0 , $1/R^8$ and $1/R^3$, a third gearset having a common ratio selected from R^0 , R^8 and $1/R$ and a fourth gearset having a common ratio selected from R^0 and $1/R$ in combination with all the remaining limitations of claim 24.

-(as to claim 26) a gearbox having a common ratio in a geometric sequence with a first gearset having a common ratio selected from R^0 , a second gearset with two

Art Unit: 3681

gearsets having a common ratio selected from $1/R^{12}$, a third gearset having a common ratio selected from $1/R^4$ and $1/R^3$ and a fourth gearset having a common ratio of $1/R$ in combination with all the remaining limitations of claim 26.

-(as to claim 27) a method of gearbox design wherein a degree of separation of a common ratio in a geometric sequence is determined by dividing a number of torques in a first gearset unit and then dividing a remainder of the degree of separation by the number of gearsets in a second gearset unit until the common ratio equals one in combination with all the remaining limitations of claim 27.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 571-272-7093. The examiner can normally be reached on M-Thur 6 AM TO 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tdl
September 1, 2005


TISHA LEWIS
PATENT EXAMINER
AU 3681 9/1/05